## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Original) A non-aqueous electrolyte comprising:
  - a cyclic carbonate;
  - a lithium salt; and
- a polyether-modified silicon oil represented by formulas 1 or 2 in which a polyether chain is bonded to a terminal end of a linear polysiloxane chain:

$$R_{2} = S_{1} = O + \left( \begin{array}{c} R_{3} & R_{5} \\ | & | \\ S_{1} = O \\ | & | \\ R_{4} & | \\ (CH_{2})_{m} = O - (C_{2}H_{4}O)_{n} = Z \end{array} \right)$$

$$(CH_{2})_{m} = O - (C_{2}H_{4}O)_{n} = Z$$

$$(1)$$

$$R_{2} = \begin{array}{c} R_{1} & R_{3} & R_{5} \\ | & | & | \\ Si - O + Si - O + Si - R_{6} \\ | & | & | \\ R_{7} & R_{4} & (CH_{2})_{m} - O - (C_{2}H_{4}O)_{n} - Z_{(2)} \end{array}$$

where k is an integer from 0 to 10;

m is a natural number from 2 to 4;

n is a natural number from 1 to 4;

 $R_1$  to  $R_7$  are independently or identically, selected from hydrogen or  $C_1$  to  $C_5$  alkyls; and Z is  $CH_3$  or  $C_2H_5$ .

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- 2. (Original) The electrolyte of claim 1, wherein the polyether-modified silicon oil has a viscosity of less than 10cSt at 25°C.
- 3. (Original) The electrolyte of claim 1, wherein the polyether-modified silicon oil has a flash point of 120°C or more.
  - 4. (Original) The electrolyte of claim 1 further comprising a chain carbonate.
- 5. (Original) The electrolyte of claim 1 further comprising a fluorinated cyclic carbonate.
  - 6. (Original) A rechargeable lithium battery comprising: a positive electrode;
  - a negative electrode; and

a polyether-modified silicon oil represented by formulas 1 or 2 in which a polyether chain is bonded to a terminal end of a linear polysiloxane chain, a cyclic carbonate and a lithium salt:

$$R_{2} - S_{1} - O + \begin{pmatrix} R_{3} & R_{5} \\ | & | \\ S_{1} - O + S_{1} - O \end{pmatrix} + \begin{pmatrix} R_{5} & R_{5} \\ | & | \\ R_{4} & (CH_{2})_{m} - O - (C_{2}H_{4}O)_{n} - Z \end{pmatrix}$$

$$(CH_{2})_{m} - O - (C_{2}H_{4}O)_{n} - Z$$

$$(1)$$

$$\begin{array}{c|c}
R_{1} & R_{3} & R_{5} \\
 & | \\
R_{2} - Si - O + Si - O + Si - O + Si - R_{6} \\
 & | \\
R_{7} & R_{4} & (CH_{2})_{m} - O - (C_{2}H_{4}O)_{n} - Z_{(2)}
\end{array}$$

where k is an integer from 0 to 10;

m is a natural number from 2 to 4;

n is a natural number from 1 to 4;

 $R_1$  to  $R_7$  are independently or identically, selected from hydrogen or  $C_1$  to  $C_5$  alkyls; and Z is  $CH_3$  or  $C_2H_5$ .

- 7. (Original) The rechargeable lithium battery of claim 6, wherein the negative electrode comprises a thin layer comprising a compound selected from the group consisting of polyacrylate compounds, aziridine compounds, fluorinated cyclic carbonates and mixtures thereof.
- 8. (Original) The rechargeable lithium battery of claim 6, wherein the non-aqueous electrolyte further comprises a chain carbonate.
- 9. (Original) The rechargeable lithium battery claim 6, wherein the non-aqueous electrolyte further comprises a fluorinated cyclic carbonate.
- 10. (Original) An electrolyte for a rechargeable lithium battery comprising:
  a polyether-modified silicon oil having a viscosity of less than 10cSt, a cyclic carbonate,
  and a lithium salt.
- 11. (Original) The electrolyte of claim 10, wherein the polyether-modified silicon oil has a flash point of 120°C or more.

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- 12. (Original) The electrolyte of claim 10 further comprising a chain carbonate.
- 13. (Original) The electrolyte of claim 10 further comprising a fluorinated cyclic carbonate.
  - 14. (Currently Amended) A rechargeable lithium battery comprising: a positive electrode;

a negative electrode; and

an electrolyte comprising a polyether-modified silicon oil having a viscosity of less than 10cSt, a cyclic carbonate, and a lithium salt wherein the polyether-modified silicon oil includes end silicons with terminal bonds consisting of Si-C or Si-H bonds.

- 15. (Original) The rechargeable lithium battery of claim 14, wherein the negative electrode comprises a thin layer comprising a compound selected from the group consisting of polyacrylate compounds, aziridine compounds, and fluorinated cyclic carbonates, or a combination thereof on a surface thereof.
- 16. (Original) The rechargeable lithium battery of claim 14, wherein the electrolyte further comprises a chain carbonate.
- 17. (Original) The rechargeable lithium battery claim 14, wherein the electrolyte further comprises a fluorinated cyclic carbonate.